Watch how to make a simple EndRot repair at www.systemthree.com!

1. Cut-away of rotting beam, window sill or other wood structure.
2. Rotten wood removed. Holes drilled for Bor8rods®.
3. Board Defense® solution applied to rot cavity and into holes for Bor8rods.
4. Bor8rods inserted into drilled holes.
5. RotFix™ applied to surface of cavity. Apply a small amount to the surface of Bor8rod holes.
6. Overfill cavity with SculpWood™ putty and/or paste. Seal Bor8rod holes.
7. Sand cured SculpWood flush. Coat surface with quality primer and/or paint.
1. Look around for the source of moisture. Fungal decay or rot must have moisture to survive. If you can determine the source, try to divert it away from the wood. Flashing, caulk, water repellents, gutters or downspouts can help.

2. Excavate the rotten wood. This can be done with a chisel, grinder, claw hammer or chainsaw. You want to see bright and dry wood. A shop vac is helpful to suck away the compost so you can see what you’re doing.

3. Remove the paint from areas directly adjacent to the fungal decay. This will allow the area to be preserved and primed to insure a long-term repair.

4. Depending on the size of the wood, determine the corresponding Bor8rods® size to use (from the chart inside the Bor8rods® package) and drill the appropriate holes beginning about ½” from the outside of the rotten area and then another 2” from there. Drill the hole about ½” deeper than the length of the Bor8rods®. Do this on both sides of the repair. Bor8rods® will dissolve and diffuse along the grain of the wood so install them close to miter joints and open end grain as well. This will provide a long-term slow release of borate preservative if the wood ever gets wet enough to rot again.

5. Mix Board Defense® at a rate of 1 pound per gallon. The two-ounce package inside the EndRot™ kit should be mixed with 16 ounces of water. Board Defense® can be applied by brush or spray onto bare wood in the rot cavity and in the bare wood adjacent to it as well as the holes you drilled for Bor8rods®. Allow at least one hour for the Board Defense® solution to soak in. If it is not dry after one hour and you need proceed to the next step, you can use a blow dryer or heat gun to force dry the repair. Do not allow the repair to get wet before proceeding to the next step or this step will have to be repeated.

6. Install the Bor8rods® into the holes you drilled. Make sure there is at least ¼” of headroom to seal the hole which will be done later.

7. If the rot cavity is dry from step 5, measure the RotFix® (2 Parts A to 1 Part B) and mix thoroughly. Apply 1 or more coats of RotFix to the cavity and lightly brush over the surface of the Bor8rods® holes being careful not to get any down in the hole. RotFix will harden the wood and create a chemical and mechanical bond between the SculpWood® and the original wood.

8. After estimating the amount of SculpWood you need, mix up equal parts of A and B until one consistent color is observed. If this is your first time, start with a golf ball size of each. Make sure the SculpWood® is packed into all areas of the cavity and there are no air pockets. You can add layers of any thickness as long as the SculpWood® is still soft and pliable. If it cures, wet the surface with mixed RotFix® and give it a few minutes to become tacky. Then continue to build up the repair. On larger repairs, you can incorporate chunks of dry, treated wood coated with RotFix® on all sides into the repair. Make sure that there are no air pockets and the repair is no less than 50% SculpWood®. Overfill the cavity by about 1/8”. SculpWood® does not shrink or expand.

9. Allow the SculpWood® to harden enough to be sanded without crumbling. In general this is about 4 hours when the temperature is above 80°F and up to 48 hours or more if the temperature is below 40. Sand the repair flush with the adjacent surfaces. Details and radiuses can be easily re-formed with gentle sanding technique. SculpWood® sands easier than wood so exercise caution not to over sand. Otherwise you have to rebuild your mistake by going back to step 7. If SculpWood® is too thick for your application, use SculpWood Paste, a smooth trowelable 1:1 paste for smoothing out small cracks or shallow voids. SculpWood Paste will harden in about 3 hours above 80°F. SculpWood Paste sands just like SculpWood®.

10. Vacuum or wipe down the sanded repair. Use a high quality 100% acrylic latex primer to coat the repair and the bare wood as well as any other areas that will be re-painted.

11. Caulk open miter joints and all areas that may allow water to seep into the wood using a high quality sealant.

12. Paint with two coats of 100% acrylic latex exterior paint.

Here’s what you’ll need:
RotFix, SculpWood Putty and/or Paste, Board Defense, Bor8rods, latex gloves, measuring cups, mixing sticks, disposable brushes, squeegees and a drill.